

# ABSTRACT

The present invention relates to a bioactive molecule, herein referred to as the CD8<sup>+</sup> suppressor molecule, that is produced by the CD8<sup>+</sup> subset of human T-lymphocytes and suppresses type-1 human immunodeficiency virus (HIV-1) replication through inhibition of viral transcription. The invention relates to isolation of CD8<sup>+</sup> cell lines and cell clones that produce that antiviral activity and to the development of assay systems for detection of the antiviral activity. The cell lines, cell clones and assay systems, described herein, may be utilized, *e.g.*, to purify, characterize and clone the CD8<sup>+</sup> suppressor molecule. The CD8<sup>+</sup> suppressor molecule may have therapeutic applications for treatment of diseases associated with HIV-1 infection.

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